CLAIMS:

1. A post-biopsy cavity treatment implant, comprising:

a radiopaque element;

a core portion coupled to the radiopaque element, the core portion including a first porous matrix defining a first controlled pore architecture, and

a shell portion coupled to the core portion, the shell portion including a second porous matrix defining a second controlled pore architecture that is different from the first controlled pore architecture.

2. The post-biopsy cavity treatment implant of claim 1, wherein the core portion surrounds the radiopaque element.

3. The post-biopsy cavity treatment implant of claim 1, wherein the shell portion surrounds the core portion.

4. The post-biopsy cavity treatment implant of claim 1, wherein the core portion surrounds the radiopaque element and the shell portion surrounds the core portion.

5. The post-biopsy cavity treatment implant of claim 1, wherein the shell portion swells faster than the core portion when the implant is placed in a biological fluid environment.

6. The post-biopsy cavity treatment implant of claim 1, wherein the shell portion swells to a greater extent than the core portion when the implant is placed in the biological fluid environment.

7. The post-biopsy cavity treatment implant of claim 1, wherein the first controlled pore architecture differs from the second controlled pore architecture with respect to at least one of: pore density, pore shape, pore orientation and pore dimensions.

8. The post-biopsy cavity treatment implant of claim 1, wherein the radiopaque element includes a portion having a paramagnetic property.

9. The post-biopsy cavity treatment implant of claim 1, wherein at least one of the core and shell portions includes a dye disposed therein.

10. The post-biopsy cavity treatment implant of claim 1, wherein at least one of the core and shell portions includes a pigment disposed therein.

11. The post-biopsy cavity treatment implant of claim 1, wherein at least one of the core and shell portions includes a contrast medium disposed therein.

12. The post-biopsy cavity treatment implant of claim 1, wherein at least one of the core and shell portions includes a therapeutic agent disposed therein.

13. The post-biopsy cavity treatment implant of claim 1, wherein at least one of the core and shell portions is biodegradable.

14. The post-biopsy cavity treatment implant of claim 1, wherein at least the shell portion includes collagen.

15. The post-biopsy cavity treatment implant of claim 1, wherein the core portion includes at least one of a polylactide (PLA), a polyglycolide (PGA), a poly(lactide-co-glycolide) (PLGA), a polyglyconate, a polyanhydride, PEG, cellulose, a gelatin, a lipid, a polysaccharide, a starch and a polyorthoester.

16. The post-biopsy cavity treatment implant of claim 1, wherein the core and shell portions are configured so as to form a laminar structure.

17. The post-biopsy cavity treatment implant of claim 1, wherein at least one of the core and shell portions is echogenic.

18. The post-biopsy cavity treatment implant of claim 1, wherein at least the shell

portion includes a plurality of fibers.

19. The post-biopsy cavity treatment implant of claim 1, wherein at least one of the core and shell portions includes an internal reservoir configured to contain at least one of a dye, a pigment and a therapeutic agent.

20. The post-biopsy cavity treatment implant of claim 19, wherein the internal reservoir is configured to deliver the at least one of dye, pigment and therapeutic agent through elution when the implant is placed in a biological fluid environment.

21. The post-biopsy cavity treatment implant of claim 19, wherein the internal reservoir is configured to deliver the at least one of dye, pigment and therapeutic agent at a first rate when the reservoir is breached and at a second rate that is lower than the first rate when the reservoir is not breached.

22. The post-biopsy cavity treatment implant of claim 1, wherein the shell portion is configured to swell to a greater degree than the core portion when the implant is placed in the biological fluid environment.

23. The post-biopsy cavity treatment implant of claim 1, wherein the shell portion includes collagen and wherein a crosslinking density of the shell portion is controlled through adding a selected amount of a bifunctional reagent to the collagen.

24. The post-biopsy cavity treatment implant of claim 23, wherein the bifunctional reagent includes at least one of an aldehyde and a cyanamide.

25. The post-biopsy cavity treatment implant of claim 24, wherein the aldehyde includes a glutaraldehyde.

26. The post-biopsy cavity treatment implant of claim 1, wherein the shell portion include collagen and wherein a crosslinking density of the shell portion is controlled by an

application of energy to the collagen.

27. The post-biopsy cavity treatment implant of claim 26, wherein the application of energy includes at least one of dehydrothermal processing, exposure to UV light and radiation.

28. The post-biopsy cavity treatment implant of claim 1, wherein the shell portion includes collagen and wherein a crosslinking density of the shell portion is controlled by a combination of dehydrothermal processing and exposure to cyanamide.

29. The post-biopsy cavity treatment implant of claim 1, wherein the implant, in a state prior to being placed in a biological fluid environment, is generally wedge-shaped.

30. The post-biopsy cavity treatment implant of claim 1, wherein the implant, in a state prior to being placed in a biological fluid environment, has a shape of a disk that has been folded multiple times.

31. The post-biopsy cavity treatment implant of claim 1, wherein the implant, in a state prior to being placed in a biological fluid environment, has a rectangular shape.

32. The post-biopsy cavity treatment implant of claim 1, wherein the shell portion defines a center portion and a peripheral portion and wherein the peripheral portion defines a plurality of independently movable free ends.

33. A post-biopsy cavity treatment implant, comprising:

at least one radiopaque element;

a core portion coupled to the at least one radiopaque element, the core portion including a first porous matrix defining a first controlled pore architecture, the core portion including at least one of a polylactide (PLA), a polyglycolide (PGA), a poly(lactide-co-glycolide) (PLGA) and a polyglyconate, and

a collagenous shell portion coupled to the core portion, the collagenous shell portion including a second porous matrix defining a second controlled pore architecture that is different from the first controlled pore architecture.

34. The post-biopsy cavity treatment implant of claim 33, wherein the core portion surrounds the radiopaque element.

35. The post-biopsy cavity treatment implant of claim 33, wherein the shell portion surrounds the core portion.

36. The post-biopsy cavity treatment implant of claim 33, wherein the core portion surrounds the radiopaque element and the shell portion surrounds the core portion.

37. The post-biopsy cavity treatment implant of claim 33, wherein the core portion is configured to biodegrade at a first controlled rate and the collagenous shell portion is configured to biodegrade at a second controlled rate that is higher than the first controlled rate when the implant is placed in the biological fluid environment.

38. The post-biopsy cavity treatment implant of claim 33, wherein the at least one radiopaque element includes a portion having a paramagnetic property.

39. The post-biopsy cavity treatment implant of claim 33, wherein at least one of the core and collagenous shell portions includes a dye disposed therein.

40. The post-biopsy cavity treatment implant of claim 33, wherein at least one of the core and collagenous shell portions includes a pigment disposed therein.

41. The post-biopsy cavity treatment implant of claim 33, wherein at least one of the core and collagenous shell portions includes a contrast medium disposed therein.

42. The post-biopsy cavity treatment implant of claim 33, wherein at least one of the core and collagenous shell portions includes a therapeutic agent disposed therein.

43. The post-biopsy cavity treatment implant of claim 33, wherein the core portion further includes at least one of a polyanhydride, PEG, cellulose, a gelatin, a lipid, a polysaccharide, a starch and a polyorthoester.

44. The post-biopsy cavity treatment implant of claim 33, wherein the core and collagenous shell portions are configured so as to form a laminar structure.

45. The post-biopsy cavity treatment implant of claim 33, wherein at least one of the core and shell portions is echogenic.

46. The post-biopsy cavity treatment implant of claim 33, wherein at least the collagenous shell portion includes a plurality of fibers.

47. The post-biopsy cavity treatment implant of claim 33, wherein at least one of the core and collagenous shell portions includes an internal reservoir configured to contain at least one of a dye, a pigment and a therapeutic agent.

48. The post-biopsy cavity treatment implant of claim 47, wherein the internal reservoir is configured to deliver the at least one of dye, pigment and therapeutic agent through elution when the implant is placed in a biological fluid environment.

49. The post-biopsy cavity treatment implant of claim 47, wherein the internal reservoir is configured to deliver the at least one of dye, pigment and therapeutic agent at a first rate when the reservoir is breached and at a second rate that is lower than the first rate when the reservoir is not breached.

50. The post-biopsy cavity treatment implant of claim 49, wherein the collagenous shell portion is configured to swell to a greater degree than the core portion when the implant is placed in a biological fluid environment.

51. The post-biopsy cavity treatment implant of claim 33, wherein a crosslinking

density of the collagenous shell portion is controlled through adding a selected amount of a bifunctional reagent to the collagen.

52. The post-biopsy cavity treatment implant of claim 51, wherein the bifunctional reagent includes at least one of an aldehyde and a cyanamide.

53. The post-biopsy cavity treatment implant of claim 52, wherein the aldehyde includes a glutaraldehyde.

54. The post-biopsy cavity treatment implant of claim 33, wherein a crosslinking density of the collagenous shell portion is controlled by an application of energy to the collagen.

55. The post-biopsy cavity treatment implant of claim 54, wherein the application of energy includes at least one of dehydrothermal processing, exposure to UV light and radiation.

56. The post-biopsy cavity treatment implant of claim 55, wherein a crosslinking density of the shell portion is controlled by a combination of dehydrothermal processing and exposure to cyanamide.

57. The post-biopsy cavity treatment implant of claim 33, wherein the implant, in a state prior to being placed in a biological fluid environment, is generally wedge-shaped.

58. The post-biopsy cavity treatment implant of claim 33, wherein the implant, in a state prior to being placed in a biological fluid environment, has a shape of a disk that has been folded multiple times.

59. The post-biopsy cavity treatment implant of claim 33, wherein the implant, in a state prior to being placed in a biological fluid environment, has a rectangular shape.

60. The post-biopsy cavity treatment implant of claim 33, wherein the shell

portion defines a center portion and a peripheral portion and wherein the peripheral portion defines a plurality of independently movable free ends.

61. A method of treating a cavity created by a percutaneous excisional procedure carried out through an incision, comprising the steps of:

providing a post-procedure cavity implant, the post-procedure cavity implant including a radiopaque element; a core portion coupled to the radiopaque element, the core portion including a first porous matrix defining a first controlled pore architecture, and a shell portion coupled to the core portion, the shell portion including a second porous matrix defining a second controlled pore architecture that is different from the first controlled pore architecture;

implanting the post-procedure cavity implant into the cavity, and

closing the incision.

62. A method of treating a cavity created by an excisional procedure, comprising the steps of:

selecting a first biodegradation rate range;

selecting a second biodegradation rate range that is different from the first biodegradation rate range;

providing a post-procedure cavity implant, the post-procedure cavity implant including a radiopaque element; a core portion coupled to the radiopaque element, the core portion being configured to biodegrade at a first effective rate within the first biodegradation rate range, and a shell portion coupled to the core portion, the shell portion being configured to biodegrade at a second effective rate within the second biodegradation rate range, and

implanting the post-procedure cavity implant within the cavity.